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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,028

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Carsten Detlefs

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NEW YORK, NY 10036

EXAMINER

DEVITO, ALEX T

ART UNIT

PAPER NUMBER

2856

NOTIFICATION DATE

DELIVERY MODE

09/02/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

klpatent@kramerlevin.com

Office Action Summary	Application No.	Applicant(s)	
	10/566,028	DETLEFS ET AL.	
	Examiner	Art Unit	
	ALEX DEVITO	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/25/06</u> . | 6) <input checked="" type="checkbox"/> Other: <u>EP0477519.pdf</u> . |

DETAILED ACTION

This Office Action is in response to the Applicant's communication filed on February 22, 2007. In virtue of this communication, claims 1-15 are currently presented in the instant application.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 7/28/03. It is noted, however, that applicant has not filed a certified copy of the 10334318.0 application as required by 35 U.S.C. 119(b).

Claim Objections

2. Claim 6 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 uses the phrase "at least one compressed air circuit" but then claim 6 has at least one defective and at least one non-defective air circuits. Since claim 1 allows for the possibility of only one air circuit, all dependent claims must inherit this limitation.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1 and 7 rejected under 35 U.S.C. 102(b) as being anticipated by Leiber (U.S. Patent No. 4,484,784).

With respect to Claim 1, Leiber discloses a method for detecting a defect or failure of a compressed air load circuit in a vehicle compressed air system, in which pressure in lines to said compressed air load circuits is continuously monitored, said method comprising the steps of: momentarily shutting off at least one compressed air load circuit (column 2, lines 29-39); at least one of measuring values and determining gradients of a variable of state in said compressed air system while said at least one compressed air load circuit is momentarily shut off (column 2, lines 45-55); comparing at least one of said values and gradients with a predefined respective threshold value [p1] (column 3, lines 61-68); and detecting at least one of a defective and failed one of said at least one compressed air load circuit when one of said values and gradients drops below said predefined respective threshold value at least one of during and after said at least one compressed air load circuit is momentarily shut off (column 4, lines 37-45).

With respect to Claim 3, Leiber discloses the method according to claim 1, wherein said step of momentarily shutting off said at least one compressed air load circuit is effected a predefined number of discrete times in succession (note column 3, line 38 the use of test cycle indicated that the process is done more than once. The cycle must necessarily be completed a number of times in succession).

With respect to Claim 7, Leiber discloses the method according to claim 1, wherein said predefined respective threshold value corresponds to a variable of state to

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be adjusted in said at least one compressed air load circuit (p1 represents pressure which is adjusted in the system, column 3, lines 64-68).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 4 and 5 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Leiber (U.S. Patent No. 4,484,784).

With respect to Claim 2, Leiber discloses the method according to claim 1, further comprising the step of permanently shutting off said at least one of a defective and failed one of said at least one compressed air load circuit. The examiner finds that the prior arts use of "blocked off" without any indication to reopen would qualify as necessarily permanent, or at least as permanent as desired. However, if the applicant disagrees, than the examiner finds that it would be within the preview of one having ordinary skill in the art at the time of the invention to leave the failed circuit closed to prevent unnecessary waste of compressed air.

With respect to Claim 4, Leiber discloses the method according to claim 3, further comprising the steps of tracking said values and gradients while said at least one compressed air load circuit is pulsed off, and permanently shutting off ones of said at least one compressed air load circuits when one of said values and gradients is below said respective threshold value even after said step of momentarily shutting off said at

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least one compressed air load circuit is effected a predefined number of discrete times in succession (column 4, lines 37-45 and note aforementioned discussion on permanently).

With respect to Claim 5, Leiber discloses the method according to claim 2, further comprising the step of refilling non-defective and non- failed ones of said at least one compressed air load circuits after said step of permanently shutting off said at least one of defective and failed compressed air load circuits is effected (column 4, lines 19-24).

With respect to Claim 6, Leiber discloses the method according to claim 2, further comprising the step of canceling shutoff of non- defective and non-failed ones of said at least one compressed air load circuits after permanent shutoff of said at least one of defective and failed one of said at least one compressed air load circuits (Column 4, lines 37-45 and note that the canceling appears non-necessary as it is impossible to carry out in the case of a single air load circuit).

7. Claims 8-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Leiber (U.S. Patent No. 4,484,784) in view of Bosch (EP 0477519).

With respect to Claim 8, Leiber discloses a system for detecting a defect or failure of a compressed air load circuit in a vehicle comprising a compressed air supply part [2] and a compressed air consumer part, said compressed air consumer part including a plurality of compressed air load circuits [3,4], electrically actuatable valves [12-15], for supplying compressed air to said compressed air load circuits, sensors [24-27] for monitoring pressure in said compressed air load circuits, and an electronic control unit [28] for evaluating electrical signals from said sensors and for controlling

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said electrically actuatable valves, wherein said electrically actuatable valves associated with said load circuits are switchable momentarily by said control unit to a shut-off state for detecting at least one of a defect and failure of one of said compressed air load circuits, and wherein said control unit is adapted to compares at least one of measured values and determined gradients of a variable of state obtained during said shut-off state with a predefined respective threshold value to identify at least one of said compressed air circuits having at least one of said values and gradients below said threshold value as at least one of a defective and failed compressed air load circuit (column 3, lines 61-68). Leiber does not specifically disclose that said compressed air supply part including a compressor.

Bosch discloses that the compressed air supply part includes a compressor [21]. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a compressor for a compressed air supply part as taught by Bosch as the compressor is an art recognized equivalent.

With respect to Claim 9, the combination of Leiber and Bosch disclose the system according to claim 8, wherein said control unit is adapted to leave an electrically actuatable valve associated with said at least one of defective and failed compressed air load circuit in said shut-off state, and wherein electrically actuatable valves of non-defective and non-failed ones of said compressed air load circuits are switchable to an open normal state (column 4, lines 37-45).

With respect to Claim 10, the combination of Leiber and Bosch disclose the system according to claim 8 wherein said control unit is adapted to effect shutoff phases

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by briefly pulsing at least one electrically actuatable valve of said compressed air load circuits to shut-off state multiple times in succession (note the use of cycle in column 3, lines 38 of Leiber indicating multiple times in succession).

With respect to Claim 11, the combination of Leiber and Bosch disclose the system according to claim 10, wherein said control unit is adapted to determine said at least one of values and gradients during said shutoff phases and, after completion of a predefined number of shutoff phases, to detect ones of said compressed air load circuits having at least one of said values and gradients below said respective threshold value as at least one of defective and failed circuits and to permanently turn off said at least one of defective and failed circuits (see Leiber, column 4, lines 37-45 and note the aforementioned discussion on permanently).

With respect to Claim 12, the combination of Leiber and Bosch disclose the system according to claim 11, wherein said control unit is adapted to switch electrically actuatable valves of non-defective and non-failed ones of said compressed air load circuits back to an open de-energized normal state (see Leiber, column 4, lines 37-45 and note the phrase "again triggable").

With respect to Claim 13, the combination of Leiber and Bosch disclose the system according to claim 11, wherein said non-defective and non-failed ones of said compressed air load circuits are refilled after said electrically actuatable valves have been switched to an open de-energized normal state (see Leiber, column 4, lines 37-45 and note the phrase "again triggable". Also the examiner is unclear how this differs

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from claim 12 as an open valve in a pressurized line would necessarily refill the line after opening).

With respect to Claim 14, the combination of Leiber and Bosch disclose the system according to claim 8, wherein said threshold value corresponds to a value of said variable of state to be adjusted in said load circuit (note Leiber's P1 is a pressure).

With respect to Claim 15, the combination of Leiber and Bosch disclose the system according to claim 8, but does not specifically disclose that said electrically actuatable valves are solenoid valves. However, the examiner finds that solenoid valves are well known examples of electrically actuatable valves and thus this difference does not define the application over the prior art.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX DEVITO whose telephone number is (571)270-7551. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 5712722208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALEX DEVITO/
Examiner, Art Unit 2856

/Hezron Williams/
Supervisory Patent Examiner, Art Unit 2856